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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT: Steven W. Meeks and Rusmin Kudinar
APPLICATION NO.: 10/660,984
FILING DATE: September 12, 2003
TITLE: System and Method For Simultaneously Measuring Thin Film
Layer Thickness, Reflectivity, Roughness, Surface Profile &
Magnetic Pattern On Thin Film Magnetic Disks & Silicon Wafers
EXAMINER: T. Nguyen
GROUP ART UNIT: 2877
ATTY. DKT. NO.: 20830-08288

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner For Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the date shown below:

Dated: October 23, 2003

By: Nathan S. Huynh

Nathan Huynh, Reg. No.: 53,052

COMMISSIONER FOR PATENTS
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INFORMATION DISCLOSURE STATEMENT

Under 37 CFR §§ 1.56 and 1.97-98

SIR:

Pursuant to the provisions of 37 CFR §§ 1.56 and 1.97-98, enclosed herewith is modified form PTO/SB/08A listing references for consideration by the Examiner. Enclosed is a copy of each listed reference that may be material to the examination of this application, and for which there may be a duty to disclose.

The filing of this Information Disclosure Statement shall not be construed as a representation regarding the completeness of the list of references, or that inclusion of a reference in this list is an admission that it is prior art or is pertinent to this application, or that a search has been made, or as an admission that the information listed is, or may be considered to be, material to patentability, or that no other material information exists, and shall not be construed as an admission against interest in any manner.

This Information Disclosure Statement is being filed:

- ☒ within three months of the filing date of the application, or date of entry into the national stage of an international application, or before the mailing date of a first office action on the merits, whichever event last occurred;

- ☐ before the mailing of a first official action after the filing of a request for continued examination (RCE) under 37 CFR § 1.114;
- ☐ after three months of the filing date of this national application or the date of entry of the national stage in an international application, or after the mailing date of the first official action on the merits, whichever event last occurred, but before the mailing date of the first to occur of either: (1) a final action under 37 CFR § 1.113; or (2) an action that otherwise closes prosecution in the application, and:
 - ☐ attached hereto is the fee set forth under 37 CFR § 1.17(p) for submission of this Information Disclosure Statement under 37 CFR § 1.97(c); OR
 - ☐ Applicant certifies pursuant to 37 CFR § 1.97(e) that:
 - ☐ each item of information contained in this Information Disclosure Statement was first cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Statement; OR
 - ☐ no item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application and, to the knowledge of the person signing this certification after making reasonable inquiry, no item of information contained in this Statement was known to any individual designated under 37 CFR § 1.56(c) more than three months prior to the filing of this Statement;
- ☐ on or before the payment of the issue fee but after the mailing date of the first to occur of either: (1) a final action under 37 CFR § 1.113; (2) a notice of allowance under 37 CFR § 1.311; or (3) an action that otherwise closes prosecution in the application, and:
 - ☐ Applicant certifies pursuant to 37 CFR. § 1.97(e) that:
 - ☐ each item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Statement; or
 - ☐ no item of information contained in this Information Disclosure Statement was cited in a communication from a

foreign patent office in a counterpart foreign application and, to the knowledge of the person signing this certification after making reasonable inquiry, no item of information contained in this Statement was known to any individual designated under 37 CFR § 1.56(c) more than three months prior to the filing of this Statement; AND

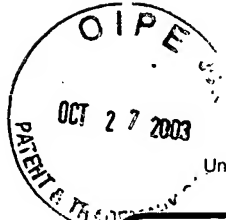
- ☐ attached hereto is the fee set forth under 37 CFR §1.17(p) for submission of this Information Disclosure Statement under 37 CFR. § 1.97(c); OR
- ☐ after the payment of the issue fee. Applicant requests that the information contained in this Information Disclosure Statement be placed in the file according to 37 CFR § 1.97(i), although the information may not be considered by the USPTO.
- ☐ This application relies, under 35 U.S.C. § 120, on the earlier filing date of prior application No. APPLICATION NO., filed on DATE FILED, and the references cited therein are hereby referenced, but are not required to be provided in this application under 37 CFR § 1.98(d).
- ☐ Each item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart application, and the communication was not received by any individual designated in 37 CFR § 1.56(c) more than thirty days prior to the filing of this Information Disclosure Statement. 37 CFR § 1.704(d).
- ☒ Applicant submits that no fee is required for the consideration of this Information Disclosure Statement.

Consideration of the listed references and favorable action are solicited.

Respectfully submitted,
STEVEN W. MEEKS & RUSMIN KUDINAR

Dated: October 23, 2003

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT				Compl t if Known	
				Application No.	10/660,984
				Filing Date	September 12, 2003
				First Named Inv ntor	Steven W. Meeks
				Art Unit	2877
				Examiner Name	T. Nguyen
Sheet	1	of	4	Attorney Docket Number	20830-08288

U.S. PATENT DOCUMENTS				
Examiner Initials*	Cite No. ¹	Document No. Number – Kind Code ² (if known)	Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document
	A1	3,885,875	05/27/1975	Rosenfeld <i>et al.</i>
	A2	4,332,477	06/01/1982	Sato
	A3	4,585,348	04/29/1986	Chastang <i>et al.</i>
	A4	4,668,860	05/26/1987	Anthon
	A5	4,870,631	09/26/1989	Stoddard
	A6	4,873,430	10/10/1989	Juliana <i>et al.</i>
	A7	5,017,012	05/21/1991	Merritt, Jr. <i>et al.</i>
	A8	5,129,724	07/14/1992	Brophy <i>et al.</i>
	A9	5,189,481	02/23/1993	Jann <i>et al.</i>
	A10	5,196,906	03/23/1993	Stover <i>et al.</i>
	A11	5,270,794	12/14/1993	Tsuji <i>et al.</i>
	A12	5,293,216	03/08/1994	Moslehi
	A13	5,313,542	05/17/1994	Castonguay
	A14	5,406,082	04/11/1995	Pearson <i>et al.</i>
	A15	5,416,594	05/16/1995	Gross <i>et al.</i>
	A16	5,446,549	08/29/1995	Mazumder <i>et al.</i>
	A17	5,463,897	11/07/1995	Prater <i>et al.</i>
	A18	5,608,527	03/04/1997	Valliant <i>et al.</i>
	A19	5,610,897	03/11/1997	Yamamoto <i>et al.</i>
	A20	5,633,747	05/27/1997	Nikoonahad
	A21	5,644,562	07/01/1997	de Groot
	A22	5,694,214	12/02/1997	Watanabe <i>et al.</i>
	A23	5,726,455	03/10/1998	Vurens
	A24	5,748,305	05/05/1998	Shimono <i>et al.</i>
	A25	5,777,740	07/07/1998	Lacey <i>et al.</i>
	A26	5,798,829	08/25/1998	Vaez-Iravani
	A27	5,864,394	01/26/1999	Jordan, III <i>et al.</i>
	A28	5,875,029	02/23/1999	Jann <i>et al.</i>
	A29	5,880,838	03/09/1999	Marx <i>et al.</i>
	A30	5,903,342	05/11/1999	Yatsugake <i>et al.</i>

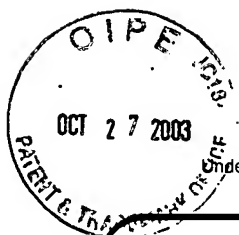
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*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609.

Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Applicant's unique citation designation number (optional). ²See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.

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Substitute for form 1449A/PTO				Complete if Known	
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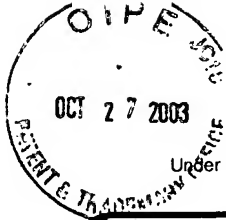
U.S. PATENT DOCUMENTS				
Examiner Initials*	Cite No. ¹	Document No. Number - Kind Code ² (if known)	Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document
	A31	5,951,891	09/14/1999	Barenboim <i>et al.</i>
	A32	5,978,091	11/02/1999	Jann <i>et al.</i>
	A33	5,985,680	11/16/1999	Singhal <i>et al.</i>
	A34	5,986,761	11/16/1999	Crawforth <i>et al.</i>
	A35	5,986,763	11/16/1999	Inoue
	A36	5,995,226	11/30/1999	Abe <i>et al.</i>
	A37	6,081,325	06/27/2000	Leslie <i>et al.</i>
	A38	6,088,092	07/11/2000	Chen <i>et al.</i>
	A39	6,091,493	07/18/2000	Stover <i>et al.</i>
	A40	6,107,637	08/22/2000	Watanabe <i>et al.</i>
	A41	6,118,525	09/12/2000	Fossey <i>et al.</i>
	A42	6,134,011	10/17/2000	Klein <i>et al.</i>
	A43	6,157,444	12/05/2000	Tomita <i>et al.</i>
	A44	6,169,601	01/2001	Eremin <i>et al.</i>
	A45	6,172,752	01/09/2001	Haruna <i>et al.</i>
	A46	6,201,601B1	03/13/2001	Vaez-Iravani <i>et al.</i>
	A47	6,248,988	06/19/2001	Krantz
	A48	6,271,916B1	08/07/2001	Marxer <i>et al.</i>
	A49	6,307,627	10/23/2001	Vurens
	A50	6,353,222B1	03/05/2002	Dotan
	A51	6,384,910B2	05/07/2002	Vaez-Iravani <i>et al.</i>
	A52	6,509,966B2	01/21/2003	Ishiguro <i>et al.</i>
	A53	6,542,248B1	04/01/2003	Schwarz
	A54	6,603,542	08/2003	Chase <i>et al.</i>

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FOREIGN PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Foreign Patent Document Country Code ³ – Number ⁴ Kind Code ⁵ (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	T ⁶
	B1	WO 98/52019	11/19/1998	Technische Universiteit Delft	
	B2	JP 3-221804	09/30/1991	NEC Corp	

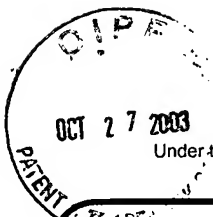
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Examiner Name	T. Nguyen				
Sheet	4	of	4	Attorney Docket Number	20830-08288

OTHER REFERENCES – NON-PATENT LITERATURE DOCUMENTS				
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published		T ⁶
	C1	W.C. Leung, W. Crooks, H. Rosen and T. Strand, <i>An Optical Method Using a Laser and an Integrating Sphere Combination for Characterizing the Thickness Profile of Magnetic Media</i> , Sept. 1989, IEEE Transaction on Magnetics, Vol. 25, No. 5. Pages 3659-3661.		
	C2	Steven W. Meeks, Walter E. Weresin, and Hal J. Rosen, <i>Optical Surface Analysis of the Head-Disk-Interface of Thin Film Disks</i> , January 1995, Transactions of the ASME, Journal of Tribology, Vol. 117, pages 112-118.		
	C3	Steven Meeks, Maxtor and Rusmin Kudinar, <i>The Next Battleground: Head-Disk Interface</i> , March 1998, Data Storage, Test & Measurement, pages 29-30, 34 and 38.		
	C4	<i>Laser Scanning Surface Profilometer</i> , [online], August 1970, [retrieved January 29, 2001], Pages 789-790, Retrieved from the Internet: <URL: http://www.delphion.com/tlbs/tdb?&order=7OC101758 .		
	C5	Meeks, Steven W.: "A Combined Ellipsometer, Reflectometer, Scatterometer and Kerr Effect Microscope for Thin Film Disk Characterization," Machine Vision Applications in Industrial Inspection VIII, Proceedings of SPIE, vol. 3966, 2000, pages 385-391, XP001085220.		

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